

[All Products](#) / [Optics](#) / [Optical Filters](#) / [Longpass Filters](#)

## **TECHSPEC®** Dichroic Laser Beam Combiners



- Polarization Insensitive
- Hard Sputtered Coating
- Multiple Sizes Available

Common Specifications

Physical & Mechanical Properties

|                           |                                |                      |                                                                                                                                                      |
|---------------------------|--------------------------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Construction:             | Mounted in Black Anodized Ring | Physical Durability: | Adhesion per MIL-PRF-13830B, Section C.4.5.12<br>Moderate abrasion per MIL-PRF-13830B, Section C.4.5.11<br>Cleaning per MIL-C-48497A Section 4.5.4.2 |
| Substrate Thickness (mm): | 2                              |                      |                                                                                                                                                      |

Optical Properties

|                         |                                             |                             |             |
|-------------------------|---------------------------------------------|-----------------------------|-------------|
| Angle of Incidence (°): | 45                                          |                             |             |
| Substrate:              | <a href="#">Fused Silica</a> (Corning 7980) | Coating:                    | Hard Coated |
| Reflection (%):         | >98                                         | Surface Quality:            | 60-40       |
| Transmission (%):       | >95                                         | Transmitted Wavefront, RMS: | <1λ         |

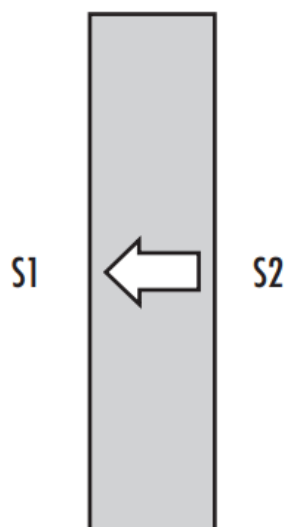
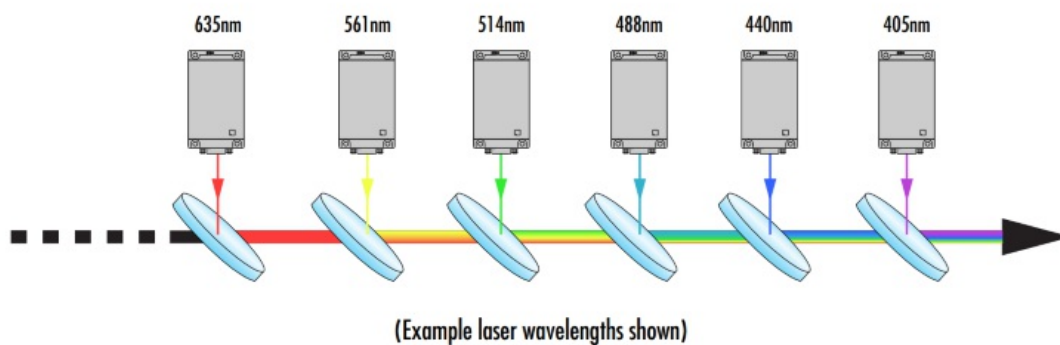
Threading & Mounting

|                       |          |
|-----------------------|----------|
| Mount Thickness (mm): | 3.5 ±0.1 |
|-----------------------|----------|

Environmental & Durability Factors

|                           |                                                                                                   |
|---------------------------|---------------------------------------------------------------------------------------------------|
| Environmental Durability: | Humidity per MIL-STD-810H, Section 507.6<br>Temperature per MIL-STD-810H, Section 501.7 and 502.7 |
|---------------------------|---------------------------------------------------------------------------------------------------|

## Technical Information



All mounted TECHSPEC® Optical Filters have an arrow on the side of the mount that points to the filter-coated surface for quick reference. Filter oriented such that arrow points to filter coated surface S1. Anti-reflective (AR) coating is applied to S2.

## Products

| Dia.<br>(mm) | Cut-On<br>Wavelength<br>(nm) | Reflection<br>Wavelength<br>(nm) | Transmission<br>Wavelength<br>(nm) | Wavelength<br>Range (nm) | Stock<br>Number         | Price                                         | Buy          |
|--------------|------------------------------|----------------------------------|------------------------------------|--------------------------|-------------------------|-----------------------------------------------|--------------|
| 12.50        | 427.00                       | 372 - 415                        | 439 - 647.1                        | 372 - 647                | <a href="#">#86-382</a> | C\$299.77<br><a href="#">Volume Pricing</a>   | 3 In Stock   |
| 25.00        | 427.00                       | 372 - 415                        | 439 - 647.1                        | 372 - 647                | <a href="#">#86-389</a> | C\$415.52<br><a href="#">Volume Pricing</a>   | 3 In Stock   |
| 50.00        | 427.00                       | 372 - 415                        | 439 - 647.1                        | 372 - 647                | <a href="#">#86-396</a> | C\$1,007.64<br><a href="#">Volume Pricing</a> | 5 In Stock   |
| 12.50        | 466.00                       | 439 - 457.9                      | 473 - 647.1                        | 439 - 647                | <a href="#">#86-383</a> | C\$299.77<br><a href="#">Volume Pricing</a>   | 3 In Stock   |
| 25.00        | 466.00                       | 439 - 457.9                      | 473 - 647.1                        | 439 - 647                | <a href="#">#86-390</a> | C\$415.52<br><a href="#">Volume Pricing</a>   | 2 In Stock   |
| 50.00        | 466.00                       | 439 - 457.9                      | 473 - 647.1                        | 439 - 647                | <a href="#">#86-397</a> | C\$1,007.64<br><a href="#">Volume Pricing</a> | 1 In Stock   |
| 12.50        | 480.00                       | 457.9 - 473                      | 488 - 647.1                        | 458 - 647                | <a href="#">#86-384</a> | C\$299.77<br><a href="#">Volume Pricing</a>   | 7 In Stock   |
| 25.00        | 480.00                       | 457.9 - 473                      | 488 - 647.1                        | 458 - 647                | <a href="#">#86-391</a> | C\$415.52<br><a href="#">Volume Pricing</a>   | 7 In Stock   |
| 50.00        | 480.00                       | 457.9 - 473                      | 488 - 647.1                        | 458 - 647                | <a href="#">#86-398</a> | C\$1,007.64<br><a href="#">Volume Pricing</a> | 12 In Stock  |
| 12.50        | 503.00                       | 473 - 491                        | 514.5 - 647.1                      | 473 - 647                | <a href="#">#86-385</a> | C\$299.77<br><a href="#">Volume Pricing</a>   | 5 In Stock   |
| 25.00        | 503.00                       | 473 - 491                        | 514.5 - 647.1                      | 473 - 647                | <a href="#">#86-392</a> | C\$415.52<br><a href="#">Volume Pricing</a>   | 6 In Stock   |
| 50.00        | 503.00                       | 473 - 491                        | 514.5 - 647.1                      | 473 - 647                | <a href="#">#86-399</a> | C\$1,007.64<br><a href="#">Volume Pricing</a> | 1 In Stock   |
| 12.50        | 552.00                       | 514.5 - 543.5                    | 561.4 - 790                        | 515 - 790                | <a href="#">#86-386</a> | C\$299.77<br><a href="#">Volume Pricing</a>   | Contact Us   |
| 25.00        | 552.00                       | 514.5 - 543.5                    | 561.4 - 790                        | 515 - 790                | <a href="#">#86-393</a> | C\$415.52<br><a href="#">Volume Pricing</a>   | 3 In Stock   |
| 50.00        | 552.00                       | 514.5 - 543.5                    | 561.4 - 790                        | 515 - 790                | <a href="#">#86-400</a> | C\$1,007.64<br><a href="#">Volume Pricing</a> | 3 In Stock   |
| 12.50        | 613.00                       | 561.4 - 594.1                    | 632.8 - 790                        | 561 - 790                | <a href="#">#86-387</a> | C\$299.77<br><a href="#">Volume Pricing</a>   | 4 In Stock   |
| 25.00        | 613.00                       | 561.4 - 594.1                    | 632.8 - 790                        | 561 - 790                | <a href="#">#86-394</a> | C\$415.52<br><a href="#">Volume Pricing</a>   | 20+ In Stock |
| 50.00        | 613.00                       | 561.4 - 594.1                    | 632.8 - 790                        | 561 - 790                | <a href="#">#86-401</a> | C\$1,007.64<br><a href="#">Volume Pricing</a> | 1 In Stock   |

|       |        |                  |           |           |                         |                                               |             |
|-------|--------|------------------|-----------|-----------|-------------------------|-----------------------------------------------|-------------|
| 12.50 | 659.00 | 632.8 -<br>647.1 | 671 - 790 | 633 - 790 | <a href="#">#86-388</a> | C\$299.77<br><a href="#">Volume Pricing</a>   | 10 In Stock |
| 25.00 | 659.00 | 632.8 -<br>647.1 | 671 - 790 | 633 - 790 | <a href="#">#86-395</a> | C\$415.52<br><a href="#">Volume Pricing</a>   | 2 In Stock  |
| 50.00 | 659.00 | 632.8 -<br>647.1 | 671 - 790 | 633 - 790 | <a href="#">#86-402</a> | C\$1,007.64<br><a href="#">Volume Pricing</a> | 4 In Stock  |



Copyright 2023, Edmund Optics Inc., 101 East Gloucester Pike, Barrington, NJ 08007-1380 USA

Phone: 1-800-363-1992 :

[www.edmundoptics.com](http://www.edmundoptics.com)